

IIT – INTRODUCTION TO INFORMATION TECHNOLOGY

IT (Information Technology): Process of Processing Digital Data using Hardware, Software & other technologies.

Computer word has been taken from **Latin Language** word “**Computare**” which means to Calculate or to Count or to Process.

Computer is an Electronic Device used to Process the Data into Information.

Abacus (Manual) is the First Computer of the World developed in **3000 BC** by **Chines People**.

ENIAC is the 1st Electrical Computer of the World developed in **1946 AD** by **John Mauchly & Prosper Eckert**.

Charles Babbage is the Father of Computer.

Charles Babbage invented the Famous machines named “Babbage Difference Engine (1820s) & Analytical Engine (1830s)”.

Lady Ada Augusta Lovelace is the First Lady Programmer.

Website is the Collection of the Webpages.

Webpage is the document (Text, Images, Audio, Videos, etc) that runs on internet & created in Web Languages.

- ➔ **Google** (Search Engine is the main Service) is developed by **Larry Page & Sergey Brin** in **4 September 1998**.
Current CEO (2026) of Google is **Sundar Pichai**.
- ➔ **Facebook** (Social Networking Services Website) is developed & Founded by **Mark Zuckerberg** in 4 Feb 2004.
Current **CEO (2026) of the Facebook** is Mark Zuckerberg.
- ➔ **YouTube** (is the Online Video Platform) developed in **14 Feb 2005** by **Chad Harley, Jawed Karin & Steve Chain**.
- ➔ **Instagram** (is the Photo and short-form video sharing social networking service) developed by **Kevin Systrom & Mike Krieger** in 6 October 2010.
- ➔ **WhatsApp** (is the Social Media Service & Instant Message (IM) Service) Developed in 3 May 2009 by **Brian Acton & Jan Koum**.
- ➔

COMPUTER IS DIVIDED INTO 2 MAJOR PARTS.

1. **HARDWARE** (All Physical Parts of Computer System)

a. **Components** (Essential Parts of Hardware)

- i. **Motherboard:**
- ii. CPU:
- iii. RAM:
- iv. ROM:
- v. HDD/SSD (Internal):

b. **Peripheral** (Extra / External Parts of Hardware)

- i. **Input:** (Through which we enter the data inside the Computer)
Examples: Mouse + Keyboard + Mic + Scanner + Joystick + Gamepad + DCAM + Web Came + Bar Code Reader + OCR + MCR
- ii. **Output:** (Used for Produced the Output)
Examples: Monitor + LCD + LED + Projector + Speaker + Printer + Plotter
- iii. **Storage:** (Storage the Information for future use)
Examples: HDD (Ext) + SSD(Ext) + USB Drive + SSD Card + CD + DVD + Floppy + Cassette

2. **SOFTWARE** (All the Programs / Set of Instructions)

a. **System Software** (Used for Complete the needs of the System)

- i. **OS (Operating System):** OS is used to Manage, Control & Coordinate the Overall activities inside the Computer.
 1. **Example:** Windows + Mac + Linux + Unix + Android + IOS
- ii. **Utility:** They are used to support the System & Enhanced the functionality of the System.
 1. **Example:** Drivers + Anti-Viruses + C Cleaners + Multimedia Players + Browsers + App-Lock & Disk Management.
- iii. **Language Translator:** They are used to translate the Computer Languages.
 1. **Example:** Assembler + Compiler + Interpreter

b. **Application Software** (Used for Complete the needs of the User)

- i. Ready Made / General Purpose
 1. MS Word + MS Excel + PowerPoint + Photoshop + Illustrator + Facebook
- ii. Custom Made / Special Purpose
 1. NADRA + Banking + Medicos + Hotel Management Software + School Management Software + Hospital Management Software + Inventory Management Software

BIOS = Basic Input Output System (1st Program which is starts when we turn on Computer)

BIOS (Firmware / Program)

BIOS is Stored on ROM (Chip / IC)

Function of BIOS: **Load** the OS (**Windows**) into the RAM + Control all I/O Devices.

COMPUTER MEMORY (Space or Storage inside computer)

Computer Memory is divided into 2 Categories.

1. PRIMARY MEMORY (Utilize by System)

- a. **RAM (Random Access Memory):** is the Main Memory of Computer also known as **working area Memory** of Computer. (RAM is Temporary Memory also known as Volatile Memory)
 - i. **SRAM (Static RAM):** Faster, more expensive, and used for cache memory. **(Supporting)**
 - ii. **DRAM (Dynamic RAM):** Commonly used for main system memory, needing constant refreshing. **(Main Memory)**
 - 1. **SDR:** Single Data Rate
 - 2. **DDR:** Double Data Rate (I + II + III + IV)
- b. **ROM (Read only Memory):** For **BIOS** (Basic Input Output System)
 - i. PROM (Programable Ready Only Memory)
 - ii. EPROM (Erasable Programable Ready Only Memory)
 - iii. EEPROM (Electricity Erasable Programable Ready Only Memory)

2. SECONDARY MEMORY (For User / For Storage / Non-Volatile)

- a. **Internal Storage** (Fixed inside the System)
 - i. HDD (Hard Disk Drive) / SSD (Solid State Drive)
- b. **External Storage** (Removable)
 - i. HDD / SSD / USB drive (Universal Serial Bus) / SSD Card / CD (Compact Disk) 750MB / DVD (Digital Video Disk) 4.2 GB+ / Floppy / Cassette
- c. **Cloud Storage** (On Servers)
 - i. G-Drive / OneDrive / iCloud / Media-fire / Dropbox

BIOS (Basic Input Output System): 1st Program starts when we turn on Computer.

BIOS is a Program / Firmware which is stored on **ROM-Chip** / ROM-IC.

BIOS is used for **Load** the OS (Windows / Android) into RAM + Control all I/O Devices.

CLASSIFICATION OF COMPUTER

Classification According to Types or Functions

Classification According to Sizes or Power

Classification According to Purpose

➔ According to Types / Functions

There are 3 types of Computers

- 1. **Analog** (Analog Computers are used to measure the Physical Quantities such as weight, temperature, speed, distance, time, thickness, blood pressure, petrol & etc.)

- a. **Example:** Weight Machine, Thermometer, Speedo Meter, Scale, Clock, BP Machine, Gas Meter, Electricity Meter, Petrol Pump.

2. Digital

Hybrid

COMPUTER LANGUAGES

1. **Low Level Languages:** (They are Difficult to Understand / Syntax of these languages is related to machine language. (They are related machine functions)
 - a. **Examples:** Binary + Assembly
2. **High Level Language:** (They are easy to Understand / Syntax of these languages is related to Human Languages.
 - a. **Desktop Programming Languages: (Java + VB.NET + Python + C++)**
 - i. **Des:** They are used to create Desktop Software (Offline)
 - ii. **Example:** Word + Excel + Photoshop + Browser + IDM + Players + Recorders + Editors
 - b. Mobile Development Programming Languages:
 - c. Web Programming Languages:
 - d. Database Programming Languages:
 - e. A.I Development Programming Language:

WINDOWS + OFFICE AUTOMATION (MS Word + MS PowerPoint + MS Excel)

Windows + E = Open File Explorer / Open Home

MS OFFICE

MS Office is the Packaged Software which contains different Official tools.

MS Office Tools: (Word + Excel + PowerPoint + Access + Publisher + Outlook + Info Path + Groove)

MS = Microsoft (Name of Software Manufacturing Company) owned by William Bill Gates.

MS WORD

MS Word is “**Word Processing**” Application Software.

MS Word is used for create Applications, Letters, CVs, Resumes, Notes, Question Papers, Time Tables, Syllabus, Notices, Essays, Book, Certificates, Award List, Outlines, **Marksheet**, Admissions Forms, Reports, Invoices, Bills & Perform all kind of Textual Work.

MS Word File is known as Document.

MS Word file extension is .docx

There are **4 Margins** in MS Word. (Left + Right + Top + Bottom)

Default Margin is **Normal**. (1-inch 4 side)

Default Page Size in MS Word is Letter. (8.5 x 11)

Common Page Size: A4 + Legal + A5

Maximum “Zoom in” in MS Word is 500%

Minimum “Zoom out” in MS Word is 10%

There are Unlimited Font Faces in MS Word. (**Calibri + Cambria + Ariel + Times New Roman + Verdana**)

Default Font Face is **Calibri**.

Default Font Size is 11. (Font Size is between 1 to 1638)

Default Font Style is Regular.

There are 4 Font Styles in MS Word.

1. Regular Font Style (Default Font Style)
2. *Italic Font Style*
3. **Bold Font Style**
4. ***Bold + Italic Font Style***

There are 4 Alignments in MS Word. (Horizontal)

1. Left (CTRL + L)
2. Right (CTRL + R)
3. Center (CTRL + E)
4. Justify (CTRL +J)

CTRL + A = Select All

CTRL + B = Bold

CTRL + C = Copy

CTRL + N = Create New Document

CTRL + S = Save

CTRL + U = Underline

CTRL + V = Paste

